AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

Claims 1-13 (canceled)

Claim 14. (currently amended): A method of chromatographically analyzing each of a plurality of samples in a detector, comprising

(a) providing an autosampler to contain a plurality of samples for chromatographic analysis;

(b) providing a plurality of chromatography columns;

(c) providing a plurality of pumps associated with said columns to establish a flow of eluant from each of said plurality of columns into said detector;

(d) a valve positioned between said detector and said flow of eluant from said columns, said valve permitting each flow of eluant to reach the detector in sequence; and

(e) providing a computer control device which adjusts the introduction of samples from said autosampler into said plurality of columns as well as the position of said valve to sequentially deliver said eluant to said detector, wherein said computer control device contains input information concerning said samples for said chromatographic analysis regarding said samples anticipated arrival at said detector for a selected elution protocol, and wherein said computer control device determines that said autosampler is ready to introduce a sample for chromatographic analysis and that sufficient time has elapsed since a previous sample has been

introduced for chromatographic analysis according to said selected elution protocol and said control device adjusts said introduction of sample from said autosampler as well as the position of said valve to sequentially deliver eluant to said detector.

Claim 15. (original): The method of claim 14 wherein said computer control device selects that point in time for introduction of each of said plurality of samples into said columns based upon input information, said input information indicating that point in time wherein said samples eluting from said column will exit said columns for detection by said detector.

Claim 16. (original): The method of claim 14 wherein said column is packed with a substantially uniformly distributed multiplicity of rigid, solid, porous particles with chromatographically active surfaces, so as to form a chromatography column having an interstitial volume between said particles, said particles having average diameters of not less than about 30 μm; and loading said surfaces with at least one solute that is reactive with said surfaces, by flowing a liquid mixture containing said solute through said column at a velocity sufficient to induce flow of said mixture within at least a substantial portion of said interstitial volume at a reduced velocity greater than about 5,000.

Claim 17. (original): In a chromatographic system containing a column, including a pump for eluting a mobile phase, and a detector for detecting compounds flowing out of said column, the improvement which comprises a computer control device that: (i) collects pressure readings over time from said pump to provide a pressure v. time tracing, (ii) compares such tracing to a stored

pressure v. time tracing for said pump; and (iii) elects to shutdown said pump when said tracing deviates from said stored tracing.

Claim 18. (original): The chromatographic system of claim 17, wherein said tracing deviates from said stored tracing by the slope or shape of the tracing between at least two pressure readings.